



HYDROGEN FLUORIDE

Agent Overview:

Highly corrosive Hydrogen fluoride can cause severe and sometimes delayed systemic health effects due to the fluoride ion penetrating deep tissue. Inhaling gas or having skin contact with liquid acid irritates skin, eyes and mucous membranes. Inhalation may cause respiratory irritation or hemorrhage. Systemic effects can occur from all routes of exposure and include nausea, vomiting, gastric pain, hypomagnesemia, cardiac arrhythmia, hypocalcemia, hyperkalemia, or sudden death. Calcium gluconate or benzalkonium is recommended first aid treatment. Immediate monitored advanced treatment is required.

Decontaminate patients prior to sample collection. No biologic marker for exposure is available; however, detecting caustic or corrosive agents in environmental samples is available for select materials.

Lab Specimen Submittal:

Authorization by Dr. Jane Getchell, Director DPHL; Christina Pleasanton, Deputy Director DPHL; or Tara Lydick, Chemical Terrorism Coordinator.

Type of Specimens

Urine: 25mL-50mL screw-cap container

Necessary for Testing:

Whole blood:

- Three, 5 or 7 mL purple-top (EDTA) tubes (vacuum fill only) AND
- One, 5 or 7 mL gray-top or green-top (vacuum fill only) AND
- Two empty urine cups and two empty blood tubes for each lot # submitted.

Packaging Instructions:

Urine: freeze specimen upon collection and ship on dry ice; label specimens and package individually; wrap with absorbent material.

Whole blood: place filled tubes in a shipping rack for stability, wrap the tubes in absorbent material, and secure with tape. Place the packaged tubes in a secondary unbreakable container. Specimens may be shipped cold but *must not* be frozen.

All: wrap sample containers and layers with tamper-proof, waterproof forensic evidence tape initialed by collector, being careful not to cover the sample labels. Ship to DPHL as Biological Substance, Category B (Packing Instruction 650).

Receiving Specimens at DPHL:

Authorized specimens are received at the lab's rear (loading dock) entrance. Submitters must present ID complete proper forms.

Handling of Specimens:

Follow chain of custody procedures. Freeze urine specimens.

Reporting Results:

Reference laboratory will notify DPHL as soon as possible. The Potential Exposure Call Log and Information form will provide information for notification of testing results outside of the DPHL.

Contact Information:

Jane Getchell, DrPH, Director DPHL, 302-223-1520 (24/7 coverage)

24/7 Emergency Contact Number: 1-888-295-5156

Revised: 04/08